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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------|----------------|----------------------|------------------------|------------------|
| 10/657,057 | 09/05/2003 | Teng Xu | 2003B093 | 1840 |
| 23455 7 | 590 01/13/2006 | | EXAMINER | |
| EXXONMOBIL CHEMICAL COMPANY | | | JOHNSON, CHRISTINA ANN | |
| 5200 BAYWA P.O. BOX 2149 | | | ART UNIT | PAPER NUMBER |
| | ΓX 77522-2149 | | 1725 | |

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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| | Application No. | Applicant(s) | • |
| | 10/657,057 | XU ET AL. | |
| Office Action Summary | Examiner | Art Unit | |
| | Christina Johnson | 1725 | - |
| The MAILING DATE of this communication Period for Reply | on appears on the cover sheet wi | th the correspondence address | |
| A SHORTENED STATUTORY PERIOD FOR F | DEDI VIQ SET TO EVDIDE 2 M | UNTHIC) OD THIDTY (30) DA | vs |
| WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 (after SIX (6) MONTHS from the mailing date of this communication of the state of the scale of th | NG DATE OF THIS COMMUNIC CFR 1.136(a). In no event, however, may a re on. period will apply and will expire SIX (6) MON' statute, cause the application to become AB | CATION. Poply be timely filed THS from the mailing date of this communic ANDONED (35 U.S.C. § 133). | |
| Status | , | | _ |
| | 00 November 2005 | | |
| 1) Responsive to communication(s) filed on 2a) This action is FINAL. 2b) 2b | This action is non-final. | | |
| 3) Since this application is in condition for a | i, | ers, prosecution as to the merit | e is |
| closed in accordance with the practice ur | · | | |
| ologod in docordance with the product of | idor Exparto quayro, 1000 0.5 | | |
| Disposition of Claims | | | |
| 4)⊠ Claim(s) <u>1-151</u> is/are pending in the appl | ication. | , | - |
| 4a) Of the above claim(s) <u>49-91</u> is/are wit | hdrawn from consideration. | | |
| 5) Claim(s) is/are allowed. | | | |
| 6)⊠ Claim(s) <u>1-48 and 92-151</u> is/are rejected. | • | | |
| 7) Claim(s) is/are objected to. | | i | |
| 8) Claim(s) are subject to restriction | and/or election requirement. | | |
| Application Papers | | _ | |
| 9) The specification is objected to by the Exa | aminer. | | - |
| 10) The drawing(s) filed on is/are: a) | | by the Examiner. | |
| Applicant may not request that any objection | - , ,— • | • | |
| Replacement drawing sheet(s) including the o | | | 21(d). |
| 11) ☐ The oath or declaration is objected to by t | he Examiner. Note the attached | Office Action or form PTO-152 | 2. |
| Priority under 35 U.S.C. § 119 | | | |
| <u> </u> | | 440(=) (4) == (5) | |
| 12) Acknowledgment is made of a claim for for a) All b) Some * c) None of: | reign priority under 35 0.5.C. 9 | 119(a)-(d) of (1). | |
| 1.☐ Certified copies of the priority docu | ments have been received | | |
| 2. Certified copies of the priority docu | · · | onlication No | |
| 3. Copies of the certified copies of the | · | · · · · · · · · · · · · · · · · · · · | • |
| application from the International B | • | received in this ivalients etage | |
| * See the attached detailed Office action for | ` ',' | received | |
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| AM | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) | A) Interview S | ummary (PTO-413) | |
| 1) Notice of References Clied (P10-692) 2) Notice of Draftsperson's Patent Drawing Review (PT0-94) | (8) Paper No(s |)/Mail Date | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/S Paper No(s)/Mail Date | | formal Patent Application (PTO-152) | • |
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DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-48 and 92-151, in the reply filed on November 9, 2005 is acknowledged. The traversal is on the ground(s) that there is no burden of search. This is not found persuasive. As discussed in the previous office action, the two groups of inventions are classified separately. A search for group I is not required for group II and vice versa. Therefore, search and examination of the entire application cannot be conducted without serious burden.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 49-91 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on November 9, 2005.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 1-48 and 92-151 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 5. Regarding claims 1-48 and 92-151, the phrase "clay-like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those

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encompassed by " like"), thereby rendering the scope of the claim(s) unascertainable.

See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 7. Claims 1-48 and 92-151 are rejected under 35 U.S.C. 102(b) as being anticipated by Martens et al.

Martens et al. (US 6,440,894) discloses a catalyst composition comprising a non-zeolitic molecular sieve, an inorganic oxide matrix, and a matrix material (column 3, lines 50-55). Suitable molecular sieve materials include SAPO-5,-8, -11, -16, -17, -18, -20, -31, -34, -35, -36, -37, -40, -41, -42, -44, -47, -56, and mixtures thereof (column 6, lines 50-65). Suitable inorganic binders include aluminum chlorhydrol which will convert to aluminum oxide (column 7, line 40 – column 8, line 10). Suitable matrix materials include kaolin clays such as Dixie, McNamee, Georgia, and Florida clays (column 8, lines 10-35).

It is taught that the catalyst is prepared by forming a slurry of the non-zeolitic molecular sieve, inorganic oxide sol, matrix material, and water, followed by spray drying, and calcination (columns 8-10). It is taught that the spray dried particles have a particle size of 50-200 microns (column 9, lines 60-65).

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The reference does not specifically detail the metal content of the clay materials used. However, the instant specification details that Dixie, McNamee, Georgia, and Florida clays are examples of kaolin clays which could be used in the instant invention. Refer to page 26 of the instant specification. Therefore, it is the position of the examiner—that, because the reference details the use of the same clay materials from the same source, the matrix material taught by the reference would inherently meet the low metal levels claimed. When the examiner has reason to believe that the functional language asserted to be critical for establishing novelty in claimed subject matter may in fact be—an inherent characteristic of the prior art, the burden of proof is shifted to Applicants to prove that the subject matter shown in the prior art does not possess the characteristics relied upon. *In re Fitzgerald et al.* 205 USPQ 594.

As each and every element of the claimed invention is taught in the prior art as — recited above, the claims are anticipated by Martens et al.

Response to Arguments

8. Applicant's arguments filed November 9, 2005 have been fully considered but they are not persuasive.

Applicant argues that the metal content of the clays is not an inherent property, regardless of the fact that the clays taught by the prior art are from the same points of origin taught as suitable in the instant case. This argument has been considered but is not persuasive. Applicant has failed to provide any evidence to support this argument, such as providing data from different clay samples from the same point of origin which

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have different metal contents, some of which would not meet the instant claims. In the absence of any evidence tending to show that the claimed metal contents would not in fact be inherent, the rejection is maintained.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in—this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE—MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christina Johnson whose telephone number is (571) 272-1176. The examiner can normally be reached on Monday-Friday, 7:30-5, with Alternate Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christina Johnson Primary Examiner Art Unit 1725

1/10/06

CAJ January 10, 2006